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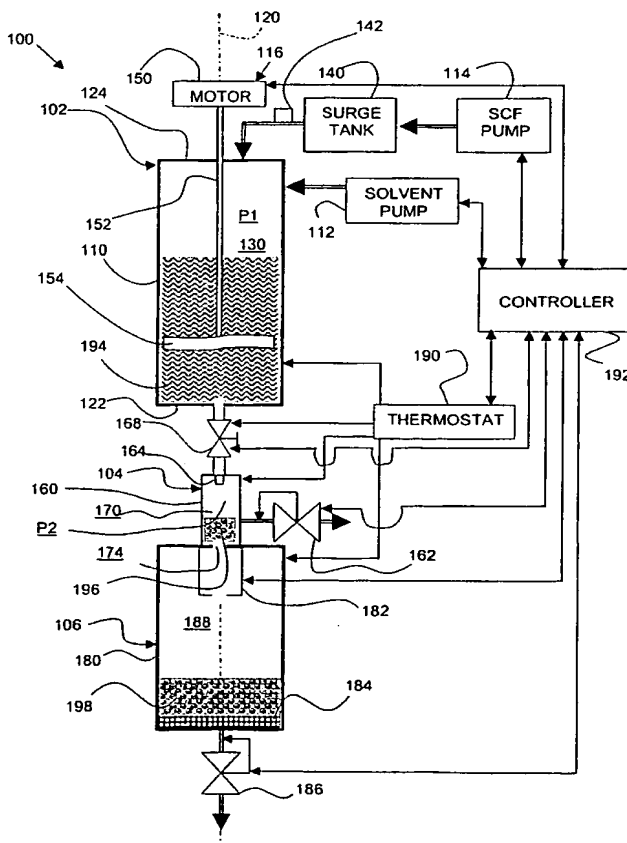
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(54) Title: METHOD AND APPARATUS FOR ENHANCED SIZE REDUCTION OF PARTICLES



(57) **Abstract:** The present invention provides methods and apparatus for producing particles via supercritical fluid processing. In one embodiment, the method includes expanding a supercritical fluid plasticized melt across a pressure drop to form solid composite particles that are simultaneously dispersed, foamed and cooled, and milling the solid particles produced to achieve the desired size distribution. In another embodiment, a pressure vessel containing a supercritical fluid plasticized melt is depressurized to form a cooled solid porous mass, which is then milled to obtain solid composite particles.

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